specific users rather than general navigation and their purpose may not be obvious to casual users; and, discrepancies to private aids are often detected, reported, and corrected less promptly than discrepancies to Coast Guard aids to navigation.

[CGD 86–031, 52 FR 42640, Nov. 6, 1987, as amended by CGD 88–018, 54 FR 48608, Nov. 24, 1989]

§ 62.23 Beacons and buoys.

(a) Aids to navigation are placed on shore or on marine sites to assist a navigator to determine his position or safe course. They may mark limits of navigable channels, or warn of dangers or obstructions to navigation. The primary components of the U.S. Aids to Navigation System are beacons and buoys.

(b) Beacons are aids to navigation structures which are permanently fixed to the earth's surface. They range from large lighthouses to small, single-pile structures and may be located on land or in the water. Lighted beacons are called lights; unlighted beacons are called daybeacons.

(1) Beacons exhibit a daymark. For small structures these are colored geometric shapes which make an aid to navigation readily visible and easily identifiable against background conditions. Generally, the daymark conveys to the mariner, during daylight hours, the same significance as does the aid's light or reflector at night. The daymark of large lighthouses and towers, however, consists of the structure itself. As a result, these daymarks do not infer lateral significance.

(2) Vessels should not pass beacons close aboard due to the danger of collision with rip-rap or structure foundations, or the obstruction or danger that the aid marks.

(c) Buoys are floating aids to navigation used extensively throughout U.S. waters. They are moored to the seabed by sinkers with chain or other moorings of various lengths.

(1) The daymark of a buoy is the color and shape of the buoy and, if so equipped, of the topmark.

(i) Can buoys have a cylindrical shape.

(ii) Nun buoys have a tapered, conical shape.

(iii) Pillar buoys have a wide cylindrical base supporting a narrower superstructure. They may be surmounted by colored shapes called topmarks.

(iv) Spherical buoys have a round shape.

(2) Mariners attempting to pass a buoy close aboard risk collision with a yawing buoy, the buoy's mooring, or with the obstruction which the buoy marks.

(3) Mariners should not rely on buoys alone for determining their positions due to factors limiting their reliability. Prudent mariners will use bearings or angles from beacons or other landmarks, soundings, and various methods of electronic navigation. Buoys vary in reliability because:

(i) Buoy positions represented on nautical charts are approximate positions only, due to practical limitations in positioning and maintaining buoys and their sinkers in precise geographical locations.

(ii) Buoy moorings vary in length. The mooring lengths define a ''watch circle'', and buoys can be expected to move within this circle. Actual watch circles do not coincide with the dots or circles representing them on charts.

(iii) Buoy positions are normally verified during periodic maintenance visits. Between visits, environmental conditions, including atmospheric and sea conditions, and seabed slope and composition, may shift buoys off their charted positions. Also buoys may be dragged off station, sunk, or capsized by a collision with a vessel.

[CGD 86–031, 52 FR 42640, Nov. 6, 1987; CGD 86–031, 52 FR 46351, Dec. 5, 1987]

§ 62.25 Lateral marks.

(a) Lateral marks define the port and starboard sides of a route to be followed. They may be either beacons or buoys.

(b) Sidemarks are lateral marks which advise the mariner to stay to one side of the mark. Their most frequent use is to mark the sides of channels; however, they may be used individually to mark obstructions outside of clearly defined channels. Sidemarks are not always placed directly on a channel edge and may be positioned outside the channel as indicated on charts and nautical publications.